



RIVERSIDE MINIATURE RAILWAY®

Riverside Miniature Railway Club Health & Safety Management Policy

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ACRONYMS	
RMRC	Riverside Miniature Railway Club
PIC	Person in Charge
H&S	Health and Safety
HSE	Health and Safety Executive
NAME	Northern Association of Model Engineers
PPE	Personal Protection Equipment
PSSR	Pressure Systems Safety Regulations
RIDDOR	Reporting of Injuries, Diseases and Dangerous Occurrences Regulations
NAMES	Northern Association of Model Engineering Societies

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Introduction

The Riverside Miniature Railway Club (RMRC) operates on selected days carrying members of the public, and at other times for the enjoyment of members of RMRC and their invited guests. One of the objectives of the RMRC is to maintain and seek to improve the high levels of safety which we currently achieve.

The Health & Safety at Work Act¹ places responsibility on the RMRC, on club members and on the general public for safety on this miniature railway site and at club sponsored events. The RMRC Safety Management Policy conforms to guidance from the Northern Association of Model Engineers (NAME)² It is designed to anticipate potential hazards and describe appropriate actions to minimise them.

This Safety Management Policy may be updated as a result of an incident, but will in any case be reviewed and updated every five years. The copy of the latest version of the Policy is available in the RMR booking office and it is also published on the RMRC website.

The RMRC is of 7 ¼ and 5 inch gauges and does not cross a public road. It is not therefore considered subject to the guidance given in the Railway Safety Principles and Guidance³ rules.

Briefing of Members

This policy should be read, as described, below by all new RMRC members as soon as possible after joining the club. It should also be read periodically by existing members to re-acquaint themselves with details they may have forgotten. It will be reissued annually at membership renewal. A copy will be kept on site.

Most of what is described in this policy is simple common sense. However, if all members adopt a common approach to Health and Safety (H&S) then the club will have the best chance of achieving its aim of maintaining and improving H&S standards.

Members' Responsibilities

The RMRC Safety Management Handbook comprises four parts. The sections you must read, learn and inwardly digest for the general members briefing are highlighted in red:

Part 1 - Risk Management:

- The Incident Reporting procedure is described, including how each incident is to be recorded and acted upon to improve H&S in future. **You need to be familiar with what constitutes a reportable incident, with the reporting procedure and with the Incident Report Form.** RMRC operates an incident recording process using the headings of Remarkable, Recordable and Reportable.
- All known risks associated with society activities are identified and actions are described to minimise each risk. **You need to be familiar with the relevant risks and the recommended ways of minimising them before taking part in specific activities.**

Part 2 - Operating Procedures. This comprises detailed instructions for running club events. **You only need to read these procedures when preparing for a specific event e.g:**

- Club Only Running Days.
- Visiting Engine Running Days
- Public Running Days. **You should read the policy on taking photos & videos (Annex E).**
- General Site Safety Procedures

¹ [Health and Safety at Work Act 1974.](#)

Part 3 - Personnel Management. This part describes the knowledge, skills and qualifications needed to participate in specific roles during society events. **You only need to read these job profiles when you are about to take on a specific role e.g:**

- Member.Engine driver (steam) – Members and Visitors.
- Engine driver (other than steam) – Members and Visitors.
- PIC
- Deputy PIC
- Operations Manager.
- Developments Coordinator
- Event Organiser.

Part 4 - Maintenance. This part describes various procedures associate with maintaining engines, club equipment and tools, and the RMRC site in general. **You need to be familiar with any maintenance procedure associate with work you are anticipating carrying out e.g:**

- Certification of steam engines.
- Permanent track.
- Plant and machinery.
- General site maintenance.

Policy continues on page 6

Part 1 – Risk Management

Training

All members are offered initial and then annual training. Members are not permitted to carry out a role at RMR if they have not undertaken the required training for that role.

Risk Analysis Tables

This part of the RMRC Safety Management Policy starts by listing all the potential safety hazards you may encounter during club activities and the actions you must take to mitigate these risks. The Risk Analysis tables (Annex A) are arranged to cover specific activities. You are responsible for reviewing the appropriate table before taking part in the corresponding activity.

While this document covers anticipated risks it is not possible to anticipate every possible hazard. It is the responsibility of every member to always be aware of what they and the people surrounding them are doing, and to avoid any risk to H&S whether it is listed here or not.

Incident Reporting Procedure

RMRC is committed to maintaining and improving the safety and efficiency of all activities undertaken under the Society's auspices. A key part of this effort involves the recording and reporting of all safety and efficiency-related incidents, analysis of those reports and appropriate actions taken to realise improvement.

Incident Recording and Reporting System

The incident reporting and recording system used by RMRC comprises an Incident Log located in the booking office. Members' briefings include familiarity with details of what types of incident must be recorded, the format of each record and further action needed in each case. Further reporting to the H&S Executive required under RIDDOR⁴ Regulations are described below and at the front of the Incident Log.

The RMRC Remarkable, Recordable and Reportable principle operates as follows:

- Remarkable, an event that occurs which is considered worth noting, but has not necessarily resulted in either incident or injury
- Recordable, an event that may have resulted in an incident or even minor injury, but which does not constitute a reportable incident under RIDDOR.
- Reportable, an event which has caused an incident including significant injury or action which requires reporting under RIDDOR.

Incidents occurring during club events away from the club site are to be recorded and transferred to the main Incident Log on return to the club site.

Incidents discovered during normal maintenance procedures are recorded and reported separately (see Annex F). However, any incident with significant safety implications or damage to equipment should also be recorded in the Incident Log for consideration by the committee.

Actions Following an Incident

Any incident that results in actual or potential injury to people is to be referred immediately to the PIC or other committee member. Incidents causing serious injuries are also subject to RIDDOR and must be reported using the on-line reporting system at [RIDDOR Reporting](#). A serious injury is one which requires medical attention from a health professional.

Incident Log and Reporting Forms

The Incident Log comprises a set of completed Reporting Forms in date order with the format given in Annex B.

⁴ Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013 (RIDDOR)

Part 2 – RMRC Operating Procedures

The RMRC [Operations Policy](#) works in conjunction with the RMRC H & S Policy

RMRC operating procedures are designed partly to address factors other than safety, such as convenience, cost and general enjoyment of events. However, the over-riding priority is for safe coverage of areas such as use of Personal Protection Equipment (PPE), working alone and communications, working with electricity etc. The RMRC operating procedures listed here are designed primarily to minimise the risks identified in Annex A.

Operating procedures described in this Part start with advice on minimising the specific risks associated with taking photographs and videos of young members of the public (see Annex E). This is followed by the requirements for operating steam vehicles. This covers certifying steam vehicles as safe, driver qualifications and briefing visiting engine owners on the requirements for operating their engines safely at the RMRC site (see also Annex D).

The next area involves the operation of the miniature railway, both for club and public events. These procedures include the minimum manning levels for each of the functional roles involved.

The final area covers general H&S issues involved in working at the RMRC site, whether for running events or for general site maintenance. This includes PPE for using machines and general procedures covering working with electricity and compressed gasses.

Recording of Digital Images

During all public events there is a specific H&S issue concerning recording of photographic and video images of young members of the public while on the RMRC site or on the portable track. Annex E gives the current RMRC policy and guidance on this issue.

Miniature Railway Operations

RMRC hosts three types of running days:

Public Running Days.

RMRC Members only.

Visiting engine running days with members from other clubs.

Public Running Days.

The operation of public running days requires more attention to the safety of the public who often have no knowledge of train operations. Therefore club staff must be on duty at all times, interacting with the public while providing a quality service. To carry this out the minimum following staff are required:

PIC

Assistant PIC

Qualified Driver(s).

Train Guard(s).

Station Master.

Booking Office.

Points Operator

Crossing Keeper

Occasionally disabled passengers travel on the railway who may be unable to straddle the carriage. A wheelchair carriage (Access-i-belle) is provided for this purpose. Two volunteers must be used to drop the stabilizing feet and to lower the carriage door, these will usually, though not exclusively, be the train crew, driver and guard of this train. Wheelchairs must then be secured using the ratchet straps. The door must be bolted in place before travel. Passengers may also use the integrated carriage seats. The crew to manage this should be established at the volunteer briefing prior to opening.

Club Members only Events

During these events a RMRC Operations Manager or PIC available at all times to supervise operations. They will arrange for members running slots and the availability of driving and carriages.

During RMRC only events RMRC members are to drive on line-of-sight and must in all circumstances be able to stop 50 metres short of any train or obstruction in front.

Drivers must not exceed 5MPH

They must, in the opinion of the Operations Manager or PIC, have the ability to drive with confidence and be aware of other trains running near them.

Should non-club members wish to ride, only qualified Drivers are authorised to drive and a Train Guard must also be on the train.

The minimum staff requirement for a Club Member Only running event is:

- Operations Manager or PIC.
- Qualified Driver and Train Guard (if non-members wish to ride).

Inter-Club Events with members from other clubs

RMRC welcomes members of other model engineering clubs and societies with their own engines to our club running days. Advice to visiting engine owners is given in Annex D, including insurance requirements, boiler certification, driver eligibility, coupling and drawbar standards and braking requirements.

A similar H&S approach is envisaged as for member's only running days. However, a minimum of four RMRC members are required to assist visiting members with coal, water, passenger carriage availability etc.

- During Inter-Club events all drivers are to drive on line-of-sight and must in all circumstances be able to stop 50 metres short of any train or obstruction in front.
- Drivers must not exceed 5MPH

They must, in the opinion of the Operations Manager or PIC, have the ability to drive with confidence and be aware of other trains running near them.

Should non-club members wish to ride, only qualified Drivers are authorised to drive and a Train Guard must also be on the train.

The minimum staff requirement for an Inter-Club running event is as follows:

- Operations Manager or PIC
- Train Guard
- Station Master

- Points Operator
- Crossing Keeper

General working on the club site

Personal safety

- Stay alert, watch what you are doing and use common sense.
- Use appropriate PPE such as eye protection, a dust mask, safety gloves, non-skid safety shoes, hard hat and hearing protection.
- Prevent unintentional starting by ensuring the operating switch is off before connecting to power source/battery pack.
- Remove adjusting tools/keys before turning the power tool on.
- Do not overreach. Keep proper footing and balance.
- Dress appropriately - especially avoid loose clothing.
- Dust extraction devices where provided should be used.
- Do not let familiarity gained from frequent use of power tools or ladders allow complacency and thereby ignore safety principles.
- Keep feet and hands away from blades and cutters especially when starting up.

Work area safety

- Keep work area clean and well lit.
- Do not operate power tools in an explosive atmosphere, such as in the presence of flammable liquids, gases or dust.
- Keep bystanders away while operating a power tool.
- Remove all foreign objects from the area that may contact a cutting blade.

Electrical safety

- Battery powered tools should be used whenever possible, but if mains powered tools are needed then the following rules must be observed
- Before using power tools check for damage, including the cable. Do not use if damaged.
- Never use the cord for carrying, pulling or unplugging the power tool.
- When operating a power tool outdoors, use an extension lead suitable for outdoor use.

Extension leads

- Extension leads should be checked regularly and fused correctly.
- Extension leads with damaged insulation sheath must not be used.

- The routing of extension cables should not pose a trip hazard to others.
- Extra care should be taken when locomotive movements are also taking place that cables are routed well away from running rails.
- Do not exceed the manufacturers maximum extension cable loading.
- Don't plug extension leads into extension leads - "daisy chain."

Power tools and ladder safety

- Members should read all safety warnings and operating instructions provided with any power tool. A file of these documents is provided in the workshop. Failure to follow all appropriate safety instructions may result in electric shock, fire and/or serious injury.
- The term "power tool" in these warnings refers to mains-operated (corded) power tools, battery operated (cordless) power tools and also petrol engine powered landscape maintenance equipment.
- In addition, some elements of the section below on PERSONAL SAFETY applies to the use of ladders and stepladders.
- Should any power tool, accessory or other item be damaged or faulty, this should be brought to the attention of the PIC immediately and should not be used.
- Use the correct power tool for the application.
- Do not force the power tool.
- Never remove guards or other safety devices that are fitted.
- Disconnect the plug from the power source and/or remove the battery pack from the power tool before making any adjustments, changing accessories, or storing power tools.
- Members unfamiliar with the power tool and these general instructions should not operate the power tool.
- Keep cutting tools sharp and clean.
- Use the power tool, cutters, accessories, tool bits etc. in accordance with the manufacturers instructions for the product.
- Keep tool handles dry, clean and free from oil and grease.
- Regularly clean air vents on all power tools.
- Where appropriate secure the workpiece using an appropriate clamp.
- When supplied always use auxiliary handles.
- Do not lay the power tool down until it has completely stopped.
- Check the work area for hidden cables before starting any form of cutting and ensure that the power cord is also routed correctly.
- When using petrol driven power tools make sure that the engine has cooled sufficiently before re-fuelling and always use a funnel.

- When using a lawnmower always push never pull towards you.
- Never clean the area inside a protective guard with your fingers. Use a trowel, stick or similar item.
- Beware of burns from a hot engine on unprotected skin.

BATTERY TOOL USE AND CARE

- Follow all manufacturers charging instructions.
- Recharge only with the charger specified by the manufacturer.
- Use only the specifically designated battery packs.
- Keep exposed battery terminals away from other metal objects.
- Do not use battery packs that are damaged or modified.
- Do not expose a battery pack or tool to fire.

Part 3 – Personnel Management

RMRC Personnel Management is designed to ensure that everyone involved in running club events is competent and fit enough to do so safely. This is achieved by means of a general induction safety briefing for new members. Regular training and safety instructions for members tasked with specific roles such as, operations, signalling, crossing management, equipment maintenance and general development work on the site.

Engine drivers, in particular, must be properly qualified and medical requirements specified in HS2020⁵ must also be complied with. Driving tests at appropriate levels are specified, including the competency requirements for those supervising driver training and testing.

Competence of Members

All RMRC members are to be given access to a copy of this H & S Policy and are asked to confirm in writing annually to the committee, that they have read and understood this material before they may participate in any RMRC event. In addition to this members will receive training and then annual subsequent refresher training for all roles. A central record of training will be held by the committee.

Anyone who volunteers at RMRC must satisfy the PIC, Operations Manager, or authorised deputy, that they have adequate knowledge of the relevant safety procedures and are competent to carry out their assigned duty. The PIC, Operations Manager or authorised deputy will add their assigned role to the list of competencies on their Certificate of Competence (see Appendix D-1).

All members of staff operating the Railway must know the location of the First Aid box and the correct procedure for the reporting of incidents (Annex B). First Aid is to be self-administered as RMRC does not have a trained First Aider

All volunteers under the age of 16 must be accompanied on site by a parent or guardian.

Responsibilities of Specific Job Roles

1. **PIC.** The whole site is under the control of a PIC while a running event is taking place. He will direct volunteers to carry-out assigned duties and arrange for appropriate reliefs during the operating period.

He will ensure that the trains in use are adequate for the numbers of public attending and that the make-up of the train is safe for the duty being performed.

2. **Assistant PIC.** This person will report to the PIC and assist them in performing their duties. They will relieve them during breaks or when their attention is required for a specific incident. These jobs are interconnected and each is reliant on each other.
3. **Qualified Driver.** The person driving any train hauling members of the public must be qualified, in the opinion of the PIC, to drive the type of locomotive and train they are using. They are responsible for preventing any driving incident that might take place from in front of their train. They are to respond to any command given by the Guard, where one is present, at all times.
4. **Train Guard.** A Guard is responsible for the safe operation of the train. They will liaise with the driver at all times and ensure the driver knows the number of passengers on the train. They must ensure that passengers are sat properly and do not disrupt the safe operation of the train. They will whistle to the driver when the train is ready to leave the station. During the journey the Guard will ensure that passenger behaviour is safe. If they need to stop the train they will signal the driver by blowing a long blast on their whistle. The Guard is responsible for protecting the rear of his train when stopped by showing a red flag to any oncoming train.

⁵[Passenger-carrying miniature railways - Guidance on safe practice". HS2020](#)

5. **Station Master.** The Station Master is responsible for the safety of people on the platform, ushering them onto waiting trains safely, making sure they are sat down properly and that the train is not overloaded. The station master is responsible for checking and clipping tickets and then for giving a brief safety announcement to passengers. Once a train is ready to depart they will liaise with the Guard, indicating that the train is ready for the journey. They is also to control the safe movement of the next train's movement to the loading platform.
6. **Station Unloader. Platform 2** The Station Unloader is responsible for calling forward a waiting train from the approach stop point into the station, unloading all passengers safely and ensuring that they leave the platform area. Once the train is fully unloaded he will allow the train forward into the control of the Station Master.
7. **Booking Office Clerk.** The Booking Office Clerk sells tickets. The BOC endeavours to ensure that underage children do not travel unaccompanied.
8. **Crossing Gate Keeper.** This person is responsible for controlling the level crossing gates and marshalling trains and passengers using them.
9. **Points Operator** This Operator controls the number of trains entering the station and by-pass loops. The points operator should monitor and check all points within their sight. If the station is too congested he may either hold a train at the point or send a train around for another loop.
10. **Operations Manager.** The Operations Manager is responsible for ensuring that there are enough volunteers to open for public running, coordinating visiting locomotives and be part of the organising team for special events. The Operations Manager also oversees the following roles:

Yard Master and/or Steaming Bay Manager. The Yard Master is responsible for controlling movements in and around exit of steaming bay and the station approach. The Steaming Bay Manager is responsible for overseeing all activities in the steaming bay, including the unloading and loading of locomotives and equipment.

Part 4 – Maintenance

RMRC maintenance procedures are aimed primarily at reducing safety risks arising from equipment breakdown. They also help to reduce the cost and effort involved in repairing or replacing faulty equipment.

A key method of ensuring that routine maintenance is carried out and that unforeseen failures are avoided in future involves accurate record-keeping. Records of which inspection and maintenance procedures have been carried out, and when, cover all aspects of RMRC and members' equipment. Examples include boiler inspections and tests, track tests, communication and signalling tests. Regular inspections of tools and equipment that are used for site maintenance are also specified here.

This Part describes Society maintenance procedures. These cover maintenance associated with:

Refueling petrol locomotives

Boiler/pressure vessel testing.

Permanent track.

Turntable & Traverser

General site maintenance.

Refuelling Petrol Locomotives

This section establishes the procedures that **MUST** be adopted whenever refuelling of petrol locomotives is necessary.

Refuelling during passenger operations **MUST** always be avoided. Fuel levels should be checked prior to public running and replenished if necessary.

- Refuelling must take place in a safe area well away from combustible materials including undergrowth, leaves etc.
- Refuelling should only be carried out by ONE competent person.
- An individual, identified as the safety assistant, who is familiar with the operation of a CO2 fire extinguisher, should be positioned 3 metres away from the refuelling operation to take emergency action if the need arises.
- With the exception of the safety assistant, no other person should be within 5 metres of the refuelling operation.
- Overfilling of the fuel tank must be avoided.
- Once refuelling has been completed fuel cans and the CO2 extinguisher must be returned to their storage locations immediately.

In the unlikely event that a locomotive runs out of fuel during passenger operations the rules below apply.

- If the failure occurs when passengers are not aboard the coaching stock the locomotive should be moved to a place of safety and the normal refuelling procedure should be adopted.
- If the failure occurs when passengers are being transported the driver should explain the situation to passengers and they should be requested to remain seated whilst the refuelling operation is completed.
- The driver should use radio communication to notify the PIC that a failed locomotive is on the circuit and to request that a person familiar with the safety assistant role bring fuel and a CO2 extinguisher to

the failed locomotive.

- The locomotive must be uncoupled from the coaching stock and moved at least 5 metres away from the carriages and their passengers.
- The standard refuelling process should then take place providing the driver is familiar with the refuelling operation.
- At this time it is not appropriate to fully refill the locomotives fuel tank. Half filling the tank will allow operations to continue for a reasonable period of time until a safer environment, with less combustible material nearby and without passengers in the vicinity can be found - if further refuelling is deemed necessary.
- Once the refuelling operation is completed, the locomotive can be recoupled, fire extinguisher and fuel returned to their storage locations and normal operations can continue.

If fire extinguishers are ever used it is the responsibility of the person who used them to notify the PIC that the fire extinguisher concerned needs to be recharged.

Boiler/Pressure Vessel Testing

RMRC events often involve members using pressure vessels (i.e. steam boilers) to power railway locomotives, traction engines and other steam-powered engines when the public and other members are present. There is a significant risk of mechanical and heat injury associated with using steam boilers in close proximity to people.

Both the Health and Safety at Work Act 1974 and the terms of our club insurance policy require us to take all reasonable precautions to minimise this risk. Two main activities are required to comply with these requirements. These are:

Ensuring that anyone operating steam engines on club property or under club auspices are competent to minimise risks associated with steam during normal operations. The club test recording scheme for achieving this is covered elsewhere.

Minimising the risk of boiler failure by instituting a strict boiler testing regime.

This section is concerned with minimising the risk of steam boilers failing to contain steam pressure during operation by applying an appropriate RMRC boiler testing regime.

Commercial pressure vessels are subject to frequent, rigorous testing under the Pressure Systems Safety Regulations, 2000 (PSSR). Fortunately, both the Health and Safety Executive (HSE) and the Insurance industry have recognised that these very rigorous tests are not appropriate for miniature steam boilers used by non-commercial hobbyists.

A more appropriate alternative to the PSSR, specifically designed for model engineering societies, has been accepted by the HSE and the insurance industry. This is:

“The Examination and Testing of Miniature Steam Boilers” (Rev Edn 2012).

Unless members choose to demonstrate compliance with the PSSR, compliance with this test code is a condition of operating *any*⁶ steam engine on RMRC premises or by club members operating elsewhere under club auspices.

The notes following this section are designed to provide helpful guidance to RMRC members on preparing for club boiler tests. These notes are informal and, in the case of dispute⁷, the reference above shall be

considered the over-riding authority.

Another type of pressure vessel commonly used by model engineers involves fuel, typically butane or propane. Regulations covering testing of these fuel tanks are contained in:

“Supplement to the Examination & Testing of Miniature Steam Boilers” (Rev Edn 2012).

Arranging for a Boiler Test

RMRC has a two members qualified to carry out boiler inspection tests on behalf of the club. These members (inspectors, witnesses and registrar) are unpaid volunteers and members should be sensitive to this when arranging for the timing and location of tests.

Members should always ask what preparation work is required by the inspector before the test and complete this work before testing. For example, for a hydraulic test the inspector will require a standard means of attaching a pressure pump hose to the boiler (see below).

Preparing for a Boiler Test

The tests described here apply to boilers rated between 3 bar/litres (e.g. 1 litre at 45 psi) and 1100 bar/litres (e.g. 100 litres at 165 psi). Different test procedures apply to smaller and larger boilers.

There are two discrete stages to testing a miniature boiler. In summary, these are:

A hydraulic test, applied at intervals of up to 4 years at the discretion of the inspector. This starts with a physical boiler examination and check of markings (where appropriate). The boiler is then filled with cold water and pumped up to at least 1½ times⁸ the normal operating pressure. The boiler should be capable of holding this pressure for at least 10 minutes with no significant leaks. The pressure gauge accuracy will also be checked, including the maximum working pressure mark.

An annual steam test. With the heat source is set to maximum steam production, the safety valves must operate to keep boiler pressure at or below maximum pressure plus 10%. The water gauge must read accurately and at least two methods must be demonstrated of injecting water into the boiler while in steam.

Hydraulic Test Preparation

Preparing a steam boiler for the hydraulic test involves the following:

Find previous hydraulic test certificates and/or boiler manufacturing documents.

Identify the boiler's capacity (in litres) and maximum working pressure (psi or bar).

Identify where the boiler markings are.

If required by the inspector, remove boiler cladding to reveal the boiler surface.

Find a torch and any mirrors needed to inspect internal surfaces.

Clean the boiler, firebox, tubes, smokebox and grate.

Check location and condition of fusible plug (if fitted).

Remove and blank off safety valves.

⁶ This code now also includes provision for testing and certifying small boilers under 3 bar/litres.

⁷ In any case of dispute, a RMRC boiler inspector's decision shall be sought and shall be final.

⁸ New boilers are hydraulically tested at twice the normal operating pressure.

Devise a method of preventing significant leakage through the regulator during the test.

Check that clack valves, injector feed pipes, whistle and any other boiler fittings do not leak and, if they do, repair them or blank them off.

If the pressure gauge does not read up to the maximum test pressure, prepare a blank to replace the pressure gauge after accuracy testing.

Provide a 5/16", 32 tpi (male) connection to the boiler for the test pressure pump.

If possible, members should conduct their own hydraulic test before presenting the engine to the inspector. This should aim to identify unacceptable leakages which could lead to test failures.

Steam Test Preparation

Preparing a boiler for the annual steam test involves the following:

Find the current hydraulic test certificate.

Find a torch and any mirrors needed to inspect internal surfaces.

Identify where the boiler markings are.

Conduct a preliminary test. With the engine in full steam (e.g. blower full on):

- Check the correct operation of the pressure and water gauges.
- Check blow-down operation of the water gauge.
- Check that the safety valves lift at maximum working pressure and limit any pressure over-run to maximum plus 10%.
- Check the correct operation of at least two methods of injecting water (especially injectors, which are prone to be difficult).
- Check that the fire can be dropped quickly in an emergency.

Ensure you have access to sufficient fire-starting materials, water, fuel and any ancillary equipment (e.g. electric blower and battery) needed to complete the test.

Testing

Boiler tests will normally involve an inspector and a qualified witness. For all boiler tests, the inspector has the right to decide how he is going to conduct the test. Do not argue. The inspector's decision is final.

The results of all club boiler tests will be recorded by the RMRC Registrar. These records will be available for up to 10 years. A certificate of the results will be issued to the owner and pass certificates must be produced on demand whenever the boiler is steamed.

References

The Examination and Testing of Miniature Steam Boilers (the "Green Book"), Rev Edn 2012.

Supplement to the Examination & Testing of Miniature Steam Boilers, Rev Edn 2012.

Permanent Track Maintenance

To clarify, this document covers both the main running rails around the circuit and those tracks in the locomotive and carriage stores.

For avoidance of doubt, should a temporary track be installed for passenger carrying purposes, it must be treated as permanent track.

On each day, when locomotives are sent out on the circuit, it is imperative that the following health and safety checks are completed, irrespective of how much or how little of the full circuit is utilised. To be clear, each time, the entire circuit needs to be checked.

It is the responsibility of the PIC to define an individual that is sufficiently competent to carry out the track walk / risk evaluation.

The objective of the track walk is to carry out a review on track conditions in the following, but not limited to, these main areas;-

- To establish if branches, twigs, debris, stones, or any other material, is in a location that could impact on the running rails being used by trains. If this is ascertained, then appropriate removal action should be taken.
- Evaluate the expansion joint gaps between sequential rails to ensure that sufficient expansion space is provided given the likely temperatures anticipated on the day concerned. Should it be noted that, in the view of the person carrying out the track walk, that sufficient expansion gap does NOT exist, then this matter should be brought to the attention of the PIC for them to evaluate if maintenance is necessary before trains can be allowed to run.
- To inspect the passenger and vehicle crossings to ensure that no stones or other debris is located between the running rails and the crossing material.
- To carry out a detailed review of all points on the circuit. This review applies equally to those points that are operated manually or those with some form of power operation.
- Evaluation of said points should primarily ensure satisfactory operation and that switch blades correctly mate with the running rails on both point operating positions.
- To ensure that point frogs and guard rails are free of any ballast or other debris that could impact on the way they were designed to work.
- To check that all moving parts are sufficiently greased to ensure smooth and satisfactory operation.
- To check every associated signal, to ensure satisfactory operation.

It is the responsibility of the person carrying out the track walk to bring to the attention of the PIC any situation that causes them any concern for the safety of the operation. The individual should also ensure that the pertinent facts are recorded in the Health and Safety document for the day.

Although this track walk is primarily intended to evaluate all aspects of the running rails, it is incumbent on the person carrying out the track walk to evaluate other line-side situations that could potentially pose a risk to travelling passengers. The list below is not intended to be an exhaustive check list of potential risks but more as an example of the sort of things that could pose a risk to travelling passengers and should therefore be assessed.

- Tree branches and other similar growths encroaching on the track especially those that could be brought closer to travelling passengers due to the effects of wind or rain.
- Stinging nettles or other undergrowth close to the track.

- An evaluation of all platforms to ensure that they are fit for passenger purposes.
- Where crossing gates are fitted that these are installed and operate in a correct and safe manner.
- Any areas of the track where surface water has collected.
- That any appropriate warning signs are present.

As stated earlier this policy document also covers the fixed tracks in both the locomotive and coaching stock storage areas. These tracks are not passenger carrying but still need to be maintained and operated in a safe and satisfactory manner.

It is the responsibility of all staff storing either locomotives or carriages in these areas to ensure that the tracks are in a satisfactory condition and that the storage of equipment on them is sufficiently secured such that it does not pose any risk to others.

Turntable & Traverser Maintenance

Please see [Traverser policy](#).

The traverser should be serviced annually by the manufacturer, Dhollandia. Latham Rd, Stukeley Meadows Industrial Estate, Huntingdon PE29 6YG 01480 435266

This policy was approved by the officers of RMR on _____
This policy be monitored and reviewed annually.

Signed: Ivan Hewlett – Chairman

Seconder – David Stapleton – Vice-Chair

Annex A – Risk Analysis Tables

Table 1 – Club Site (General)				
Ser	Risk	Description	Potential Impact	Mitigation
1-1	Moving vehicles & plant.	The usual risks of injuries from moving vehicles apply. This includes steam powered vehicles other than railway locomotives.	Severe	<ul style="list-style-type: none"> ● Marked speed limit of 5 mph on site. ● All plant operator/drivers to be appropriately qualified. ● Site speed limits included in new members' H&S briefing. ● A minimum of two people with access to at least one mobile phone must be on the site while work is taking place.

Table 2 – Normal Operation of the Miniature Railway - Members Only				
Ser	Risk	Description	Potential Impact	Mitigation
2-1	Collision with trackside objects	Train crews and passengers risk injury and equipment risks damage caused by collision with trackside objects.	Severe	<ul style="list-style-type: none"> ● Inspect track before every operation - trackside objects must be at least 600mm away from the nearest rail. ● Track speed limit of 5mph except where otherwise indicated. ● Identify potential danger points and warn drivers and passengers.
2-2	Collision with people	Train crews and passengers risk injury and equipment risks damage caused by collision with other people.	Severe	<ul style="list-style-type: none"> ● Track speed limit of 5mph except where otherwise indicated. ● Mark suitable track crossing points with good visibility. ● Maintain fences between the track and main pedestrian walkways. ● Identify potential danger points and warn drivers and pedestrians. ● Include track crossing rules in new members' H&S briefing.
2-3	Runaway engine collision	Train crews and passengers risk injury and equipment risks damage caused by a runaway engine.	Severe	<ul style="list-style-type: none"> ● Drivers must be appropriately qualified (see Annex D). ● Couplings must comply with Society specification (see Annex C).
2-4	Derailments	Train crews and passengers risk injury and equipment risks damage caused by derailment.	Severe	<ul style="list-style-type: none"> ● Inspect track before every operation. ● Engines and carriages are subject to gauge checks before using the railway (see Annex C). ● Track speed limit of 8mph except where otherwise indicated. ● Identify potential danger points and warn drivers and passengers.

Table 3 – Inter-Club Operation of the Miniature Railway – Visitors from Other Clubs				
Ser	Risk	Description	Potential Impact	Mitigation
3-1	All risks listed in Tables 1&2	Various	As listed	As listed
3-2	Public vehicles	People disembarking from vehicles or	Severe	<ul style="list-style-type: none"> ● Marked speed limit of 5 mph on site.

Table 3 – Inter-Club Operation of the Miniature Railway – Visitors from Other Clubs

Ser	Risk	Description	Potential Impact	Mitigation
	Moving on the site.	Entering the site on foot have to walk to the entrance to the railway. The usual risks of injuries from moving vehicles apply.		<ul style="list-style-type: none">● Parking warden to be briefed on safe movement of vehicles.● Include site speed limits in new members' H&S briefing.

Table 4 – Public Operation of the Miniature Railway

Ser	Risk	Description	Potential Impact	Mitigation
4-1	All risks listed in Tables 1&2	Various	As listed	As listed
4-2	Public vehicles moving on the site.	People disembarking from vehicles or entering the site on foot have to walk to the entrance to the railway. The usual risks of injuries from moving vehicles apply.	Severe	<ul style="list-style-type: none">● Marked speed limit of 5 mph on site.● Parking warden to be briefed on safe movement of vehicles.● Include site speed limits in new members' H&S briefing.

Annex B – Advice for Visiting Engine Drivers

RMRC welcomes members of other model engineering clubs and societies with their own engines to our public and club running days. Insurance requirements, boiler certification, driver eligibility, coupling and drawbar standards and braking requirements are given below.

Public Liability Insurance

Visitors intending to run a steam locomotive at RMRC must bring with them a certificate of Public Liability Insurance with cover for not less than £5m. For a member of a club or society affiliated to the Northern Association of Model Engineers (NAME) certificates are available from their club free of charge. For a member of a club or society affiliated to the Southern Federation of Model Engineering Societies (SFMES) this insurance is available from the Federation's insurance broker for a small additional charge.

For visitors who are not members of a NAME, SFMES or a 7¼" Society affiliated club individual insurance certificates (e.g. [Walker Midgley](#) or [Footman James](#)) are acceptable.

Certification for steam engines

To operate a steam powered engine at our site current hydraulic and steam certificates for the model must be presented, conforming to The Examination & Testing of Miniature Steam Boilers (2008 or 2012 edition).

If either the hydraulic or steam test certificates have not been issued by a NAME or SFMES affiliated club or society, then an appropriately worded insurance certificate and club or society membership card must also be produced.

Driver Eligibility

RMRC Insurance requirements define the eligibility of drivers as set out in the tables below:

a. Driver under 16:	Driver's Membership		
	RMRC	Other Club (c)	Non-Club
Passenger Type:			
RMRC Member	Yes (a)	Yes (a)	No
Other Club Member	Yes (a)	Yes (a)	No
Family	Yes (a)	Yes (a)	No
Friends	No	No	No
General Public (b)	No	No	No

b. Driver 16 and over:	Driver's Membership		
	RMRC	Other Club (c)	Non-Club (d)
Passenger Type:			
RMRC Member	Yes	Yes	No
Other Club Member	Yes	Yes	No
Family	Yes	Yes	No
Friends	Yes	Yes	No
General Public (b)	Yes	Yes	No

Notes:

- (a) Only under supervision of a RMRC driver
- (b) I.e. Passengers at public running days and special events
- (c) Other club member to be declared to the PIC as RMRC day visitor
- (d) Non club member may be declared as a RMRC day visitor at the discretion of a RMRC committee member

Speed

RMRC operates a strict 5MPH driving speed

Track, Coupling and Drawbar Standards

The RMRC railway accommodates engines at 5in and 7¼in gauge.

All trains shall have solid couplings fitted with coupling pins and retainers throughout. This requirement also applies to couplings between locomotives and tenders. On vehicles designed for 7¼in. gauge a supplementary form of secure retention should be fitted between the locomotive and the driving truck i.e. safety chain or cable.

Braking Requirements

Steam-driven engines provide their own braking using the regulator. However, with a heavily-laden train this may not be sufficient for safe working. Driving trucks must incorporate manually applied or vacuum brakes. Carriages may also incorporate vacuum brakes when hauling members of the public.

Policy continues to annex C

Annex C – RESTRICTIONS ON THE USE OF DIGITAL IMAGES

For the purposes of this policy, an image is a still or moving picture. This policy applies to the collection and use of images at the RMRC site or at any event in which the Society is taking part. It specifically applies to the taking of images of a person under 18 years old who can be identified from the image. Or any person of any age who is known to have protected identity. The policy applies to all club officials, members and visitors, including the parents of children.

When a person's image is captured, whether by camera, CCTV, video, web camera or mobile phone, and that person can be identified, then the image may be considered personal data. This means that the image must be processed in line with the General Data Protection Act. 'Processing' means anything that is done to the image for example recording it, using it, editing it or sharing it – particularly on social media and the internet.

POLICY FOR SOCIETY MEMBERS AND OFFICIALS

Society members may take digital images at club events for their own use without permission, except where the parents of children under 18, or the children themselves, or a person with protected identity refuse permission to be included in the image. Society officials may also place other restrictions on the taking of images from time to time.

It is not illegal to take photographs of anyone in a public place, including children and to then post these photographs on social media or a website. However if a person or parent asks for the photograph to be removed, this must be done immediately without question. It is good practice not to name adults or children in photographs without their or in the case of children, parental consent.

Any photographs must be checked thoroughly to ensure that they could in no way be classed as 'indecent'. i.e Children must not be seen to be showing underwear.

ADVICE TO VISITORS

At RMRC we permit parents to take video and photographs at club events and, on request, will give the following e-Safety guidance:

When taking photographs, parents are advised that:

- Since Riverside Miniature Railway operates in a public place, we do not need to obtain the permission of passengers to take photographs and/or video
- However, we do ask passengers to respect privacy and refrain from taking photographs and/or video of other passengers if asked not to.
- If passengers **do not** wish to appear in photographs and/or videos taken by RMRC, they must inform the Station Master.